



## WELDING PROCEDURE SPECIFICATION

WPS- 6000-103	REV. NO.: 0	DATE: 9/1/2004	**APPLICABILITY**
WELDING PROCESS/ES TB	and TB	ASME: Y	AWS:
SUPPORTING PQ 600-103			OTHER:

**JOINT** This WPS shall be used in conjunction with the General Welding Standards (GWS) and Welding Fabrication Procedure (WFP) sections and criteria for joint details, repairs, NDE, inspection etc.

Weld Joint Type Socket/Lap	Class: Brazing
See GWS 1-06 for details	Preparation: Wire Brush/Abrasive Cloth
Root Opening: N/A	Backing: N/A
Backgrind root: N/A	Backing Mat.: N/A
Bkgrd Method: N/A	GTAW Flux: N/A      Backing Retainer: N/A

<b>FILLER METALS:</b>		Class: BCuP-5	and BCuP-5
A No:	SFA Class: 5.8 and 5.8	F No: 103 and 103	Size: 1/16 3/32 1/8
Insert: N	Insert Desc.: N/A	Weld Metal Thickness Range:	
Flux: Type: N/A	Size: N/A	AWS:	thru
Filler Metal Note:		ASME: 0.031	thru 0.125

<b>BASE MATERIAL</b>	P No. 107	Gr No. All	to: P No. 107      Gr No. All
Spec. ASTM B-88 Cu	Grade: N/A	to: Spec. ASTM B-88 Cu	Grade: N/A
Pipe Dia Range: Groove > 0			
Thickness Range: Groove :	AWS:	thru	ASME: 0.031      thru 0.125

<b>QUALIFIED POSITIONS</b>	VU, HF	FF, VD	Vertical Progression: N/A
Preheat Min. Temp.:	0 F	GAS: Shielding:	N/A      or N/A
Interpass Max. Temp.	0 F	Gas Composition:	0 % 0 % 0 %
Preheat Maintenance:	0 F	Gas Flow Rate cfh	0 to 0
		Backing Gas/Comp:	N/A      0 %
PWHT: Time @ F Temp.	0	Backing Gas Flow cfh	0 to 0
Temp. Range:	0 F to 0 F	Trailing Gas/Comp:	0 %

<b>PREPARED BY</b>	<u>Kelly Bingham</u> Signature on file at FWO-DECS	DATE: 8/31/2004
<b>APPROVED BY</b>	<u>Tobin Oruch</u> Signature on file at FWO-DECS	DATE: 9/1/2004

**Note:**For SC/SS/ML-1/ML-2 work, this WPS requires independent review.

**WELDING CHARACTERISTICS:**

**Current:** 0 and 0      **Tungsten type:** N/A      **Transfer Mode:** N/A  
**Ranges: Amps** 0 to 0      **Pulsing Cycle:** 0 to 0  
**Volts** 0 to 0      **Background Current:** 0  
**Fuel Gas:** Acetylene      **Flame:** Neutral      **Braze temp. F** 1150 to 1600

**WELDING TECHNIQUE:** For cleaning, grinding, and inspection criteria refer to Volume 2, Welding Fabrication Procedures

**Technique:** Face Feed      **Cleaning Method:** Wire Brush  
**Single Pass of Multi Pass:** S      **Stringer or Weave bead (S/W):** N/A      **Oscillation:** N  
**GMAW Gun Angle °:** 0 to 0      **Forehand or Backhand for GMAW (F/B):** N/A  
**Maximum K/J Heat Input**      **Travel speed/ipm:** 0 - 0      **Gas Cup Size:** #3

**PROCEDURE QUALIFIED FOR:**

**Charpy "V" Notch:** N      **Nil-Ductil Transition Temperature:** N      **Dynamic Tear:** N

**Comments:**

Weld Layer	Manual Process	Filler Metals	Size	Amp Range	Volt Range	Travel ipm	Nozzel Angle	Other
1	TB	BCuP-5	1/16	0 0	0 0	0 0	0	
2	TB	BCuP-5	3/32	0 0	0 0	0 0	0	
3			1/8					
4								
5								
6								
7								
8								

**REM.** \* Weld layers are representative only - actual number of passes and layer sequence may vary due to variations in joint design, thickness and fitup.